



Needs Analysis of an Integrated Basketball Coaching Policy Model in Indonesia

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ABSTRACT

This study analyzed the performance needs of basketball coaching and the development of policies in Indonesia, focusing on actual performance, expected performance, and performance gaps. Using an explanatory sequential mixed-method design with 35 respondents (teachers, coaches, parents), the study evaluated six variables, including funding support, club-school collaboration, training facilities, competition system, coach development system, and career support. Quantitative data were analyzed using descriptive statistics and the Kruskal-Wallis test, while qualitative data were obtained through interviews. The results showed consistent perceptions across stakeholder groups that actual performance remained suboptimal, while expected performance was high. Performance gaps arose from limited funding, weak collaboration, and inadequate facilities. There was no established competition system, coach development system, or clear career support. The findings provide an empirical foundation for formulating a more integrated basketball coaching and developing a policy model.

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INTRODUCTION

Basketball in Indonesia has shown continuous growth. However, it still lacks structured development pathways and integrated coaching guidance. Although national frameworks such as the Long-Term Athlete Development (LTAD) model and the National Sports System Law (DBON) are already in place, their practical implementation in basketball development remains inconsistent. The LTAD model emphasizes the importance of long-term, systematic development to establish strong physical and character foundations (Balyi et al., 2013). In contrast, countries with more advanced sport systems prioritize structured long-term pathways, supported by adequate funding, coach development, high-quality facilities, and well-organized competition systems (De Bosscher et al., 2006; De Bosscher et al., 2009). In England, for example, sport policy is structured around four key elements: lifelong physical activity through physical education, lifelong participation through clubs or extracurricular programs, sport development through collaboration with clubs, and talent development through structured school-based competition (Westerbeek et al., 2021). Collectively, these elements contribute to increased youth engagement in sport while simultaneously promoting personal development and community participation.

Globally, sports development is increasingly shifting toward a “development through sport” approach, which emphasizes character building, life skills, and broader social outcomes (Black, 2017; Ha et al., 2015; Ma'mun, 2019; Pennington, 2017). Indonesia has acknowledged this shift through national legislation and the DBON 2021–2045 framework. However, basketball-specific coaching policies remain insufficiently defined. In practice, parents and coaches often prioritize rapid achievement without aligning with appropriate developmental stages. This misalignment highlights the need for structured and evidence-based coaching guidelines to support sustainable athlete development.

To design an integrated basketball coaching policy model, it is essential to understand actual performance conditions, expected performance standards, and the gaps between them. Needs analysis provides a systematic approach to identifying priority areas for improvement. Measuring actual performance helps identify key variables requiring attention, while defining desired performance captures stakeholder expectations. Furthermore, identifying performance gaps provides a clear direction for developing appropriate solutions (Branch, 2010; Handayani et al., 2019; Park, 2022). Many policy models fail due to insufficient diagnosis of existing gaps and limited incorporation of stakeholder perspectives. Therefore, this study aims to analyze the performance needs of basketball coaching and development as a foundation for formulating integrated coaching strategies and developing an innovative basketball coaching policy model for Indonesia.

METHODS

Research Design

This study employed an explanatory sequential mixed-method design, in which quantitative data collection and analysis were followed by qualitative interviews to provide deeper interpretation of the findings.

Participants

The quantitative phase involved 35 respondents, consisting of 10 physical education teachers, 5 coaches, and 20 parents. The qualitative phase included 5 participants: 2 teachers, 1 coach, and 2 parents.

Instruments

A 15-item self-developed questionnaire was used to measure actual performance, expected performance, and the causes of performance gaps across six variables: funding support, club–school collaboration, training facilities, competition system, coach development system, and career support. The instrument was validated by experts to ensure the clarity and relevance of the items.

Data Collection Procedure

Quantitative data were collected using online forms. Qualitative data were obtained through semi-structured interviews conducted either in person or via telephone.

Data Analysis

Quantitative data were analyzed using descriptive statistics and the Kruskal–Wallis test to identify differences across groups. Qualitative data were analyzed using thematic analysis, which involved coding, categorizing, and identifying key themes. Finally, the quantitative and qualitative findings were integrated to provide a comprehensive interpretation of the results.

Table 1. Data Analysis

Quantitative data collection	Quantitative data analysis	Connecting quantitative and qualitative phases	Qualitative data collection	Qualitative data analysis	Integration of quantitative and qualitative results
Data collection using online survey (n=35) Use six statements/questions for each coaching indicator.	Descriptive Analysis Normality Test Kruskal Wallis test to find the differences between three sample groups with the help of SPSS version 29	Determining informants using purposive techniques (n=6) Developing a semi-structured interview guide	Conducting semi-structured interviews Data triangulation (respondents)	Prepare and organize data for analysis Transcribe data Getting familiar with data Recording data Data encoding Switch from code to categories and categories to themes	Interpreting and explaining quantitative study results Interpret and explain the results of qualitative studies

RESULTS

As outlined in the explanatory sequential mixed-method design proposed by John W. Creswell, the integration of quantitative and qualitative data is essential for achieving a comprehensive understanding of the research problem. This approach enables researchers to combine the strengths of both methodologies to generate richer and more meaningful insights (Sharma et al., 2023).

Accordingly, the results are presented in two stages. First, the findings from the quantitative analysis are reported, followed by qualitative findings that provide deeper interpretation and explanation of the quantitative results (Ivankova et al., 2006). This

structure emphasizes the role of qualitative data in enhancing and contextualizing the interpretation of quantitative outcomes.

Table 2. Actual Performance Description

NO	Statement	Category	N	Min	Max	Mean	SD
1	The current funding (financial) support policy system from government agencies/schools is not yet sufficient, so it is not yet capable of organizing basketball coaching and development in a tiered and sustainable manner."	Teacher	10	1	4	2.0	0.9
		Coach	5	1	2	1.2	0.4
		Parent	20	1	3	1.8	0.6
		TOTAL	35	1	4	1.7	0.9
2	There is currently no regulation from government agencies for career support for athletes and after becoming an athlete, so becoming an athlete is not a priority	Teacher	10	1	4	1.9	0.9
		Coach	5	1	3	2.0	1.0
		Parent	20	1	5	2.4	1.1
		TOTAL	35	1	4	1.5	0.6
3	Training facilities for basketball athletes are not basketball is not currently good, so training a in schools. Priority	Teacher	10	1	5	1.9	1.2
		Coach	5	1	2	1.8	0.4
		Parent	20	1	5	2.6	1.3
		TOTAL	35	1	5	2.2	1.1
4	Currently there is no structured and sustainable Coach Development system in basketball training in schools or clubs.	Teacher	10	1	4	1.9	1.0
		Coach	5	1	2	1.6	0.5
		Parent	20	1	4	2	0.9
		TOTAL	35	1	3	1.6	0.6
5	Currently there is no cooperation system from Clubs to Schools in assisting with coaching and development to improve basketball coaching in schools.	Teacher	10	1	5	2.0	1.2
		Coach	5	2	3	2.2	0.4
		Parent	20	1	5	2.5	1.0
		TOTAL	35	1	5	2.2	0.9
6	Currently there is no tiered and sustainable competition system (amateur, intermediate, advanced).	Teacher	10	1	5	2.1	1.2
		Coach	5	1	2	1.4	0.5
		Parent	20	1	5	2.4	0.9
		TOTAL	35	1	5	2.1	1

Actual Performance Descriptions

Based on the data collection and analysis results, the majority of respondents ($n = 35$) agreed that the current basketball coaching and development policy is not yet optimal across the six research variables (Table 2). These variables include funding support (1.7), club–school collaboration (1.5), talent identification and coach development (2.2), training facilities (1.6), competition system (2.2), and scientific research and innovation (2.1).

Overall, all variables received mean scores below 3.0 across the three respondent groups, namely teachers, coaches, and parents, who are directly involved in or observe the basketball coaching and development process. These findings indicate that the existing basketball coaching and development policy has not been optimally implemented.

Desired Performance Results

Similar to the findings on actual performance, the analysis of desired performance across the six variables indicates the need for serious attention (see Table 3). On average, all respondent groups reported low scores (< 2.0) for the expected conditions, including funding

support, school–club collaboration, coach development, athlete career support, competition systems, and scientific research and innovation.

Furthermore, in formulating the basketball coaching and development policy model, respondents consistently emphasized the need for a structured policy framework that can guide the implementation of a comprehensive coaching system. Such a framework is expected to provide clear direction for the coaching process, supported by adequate funding, effective school–club collaboration, athlete career pathways, appropriate training facilities, and well-developed coaching systems.

Therefore, in developing a basketball coaching and development policy model, it is essential to adopt a comprehensive and contextually grounded approach across all key performance areas. This integration is necessary to ensure the development of a more equitable and high-quality basketball coaching and development system that aligns with the actual needs of the field.

Identification of The Causes of Performance Gaps

Following the assessment of actual and desired performance, the study proceeded to identify the underlying causes of the observed performance gaps. These gaps provide important insights into the factors contributing to the suboptimal implementation of the basketball coaching and development policy across the six research variables.

Unlike the measurement of actual and desired performance, the identification of performance gap causes (see Table 4) was conducted using open-ended questions distributed via Google Forms. This approach enabled the researchers to capture a wide range of responses from the three respondent groups. Subsequently, semi-structured interviews were conducted to explore the contextual meaning of these responses in greater depth.

The analysis of these findings highlights several key factors that have not been optimally aligned with operational practices, thereby hindering effective coaching and development processes.

Integration of Quantitative and Qualitative Results

Following the analysis of actual and desired performance data, further statistical testing was conducted to examine data distribution across respondent groups. The results of the Kolmogorov–Smirnov normality test indicated that the data from the teacher group were normally distributed ($p = 0.021$), whereas the data from the other two groups were not normally distributed. Therefore, the overall dataset was considered non-normally distributed.

Based on the results of the normality test, a Kruskal–Wallis test (non-parametric) was conducted to examine whether there were differences in perceptions of actual and desired performance across the three respondent groups (teachers, coaches, and parents) in relation to funding support, collaboration policies, talent identification and coach development systems, training facilities and career support, competition systems, and scientific research.

The results of the Kruskal–Wallis test showed that the significance value for actual performance was 0.054 (> 0.05), while the significance value for desired performance was 0.152 (> 0.05). These findings indicate that there were no statistically significant differences in perceptions among the three respondent groups regarding both actual and desired performance.

Table 4. Description of causes of performance gaps

NO	Question	Teacher Version	Trainer Version	Parental Version
1	What causes the current funding (financial) support from government agencies/schools to be insufficient, SO that they are unable to organize basketball coaching and development in a tiered and sustainable manner?	Basketball sports activities are not a priority of the national education system. So the funding support is minimal.	Basketball sports in schools have not been a top priority, schools often allocate funds for other needs in the field of education or academics	There are still other areas that are seen as more supportive of school goals, so that sports are not a priority.
2	What is the reason that there is currently no regulation from government agencies regarding career support for athletes and after becoming an athlete, SO that becoming an athlete is not a priority?	For almost 100% total support we fully support especially me as a student, coaching under this auspices provides freedom for athlete children including grades are not only determined from the results of the child's thoughts, knowledge but our athlete children are inventoried and identified even though they do not participate we give them the freedom to participate in matches anywhere also give dispensation and give more than usual grades. Because this skill cannot be paid for just like that. It must go through a long process we appreciate all of that.	Still very limited in my opinion. Yes, because schools that have access to it are limited. Why is it limited, basically the career itself looks at the name of a respected school. That's what I think.	Well, that was it. This has not been recognized by the government, by the education office. That basketball is a club sport or group sport that can bring a good name to a school or region through basketball. But here it is still mentioned as a trial sport to make children excel. It is very unfortunate.

3	What causes the current training facilities for basketball athletes to be inadequate, so that basketball training is uneven and has not become a priority in schools?	Budget Constraints Available funds may not be sufficient to develop or maintain adequate sports facilities and support career programs. Unequal Priorities: Basketball may not be prioritized over other sports or activities that are considered more popular or important in the school or community. Lack of Infrastructure: Many schools or communities may not have adequate space or the equipment necessary to optimally practice basketball."	What the future goals are, they are not stated in the official regulations so their existence is still weak and unimportant.	Maybe there is a lack of funds or maybe basketball has not been a priority or maybe there is a lack of people interested in pursuing basketball.
4	What is the reason for the absence of a coach development system?	Limited Coaching Resources. And the school does not have enough equipment or funds to carry out testing and talent development effectively because basketball is not a top priority on the school's agenda.	The focus of the extracurricular itself is still on developing students' interests, so there is no system yet, which should be developing students' interests and TALENTS.	Lack of facilities and infrastructure, coaching resources, and support from the school.
5	What causes the presence of clubs to not be evenly distributed in every school in assisting in coaching and development in improving the foundation and participation of Basketball training (Coach coaching)?	There is no good cooperation between the two due to differences in background, achievement- oriented clubs that require large funding for the implementation process while the school's ability to inject funds does not exist. So the selection of HR coaches is not a coach who is an expert in his field but often relies on alumni who have the ability to play basketball.	Clubs have their own coaching system, and do not think that extracurricular activities at school can be a bridge for them to achieve by having clubs at their respective schools which creates equal coaching.	There is no commitment from the school to improve achievements in extracurricular basketball, so support from the school is very lacking.
6	What is the reason that there is currently no sustainable, tiered basketball competition system (Beginner, Intermediate, Skilled)?	There is still a lack of coordination between clubs & Pengcab or Pengprov.	This usually happens because the new team feels insecure/hesitant to take part in a match where the match is usually a mix of the best teams and teams that can usually meet/there is no team grouping.	Because the development of basketball is currently still less famous than football or other sports. So that its fans are not evenly distributed.

Table 5. Normality Test

	Actual Performance			Desired Performance		
	Teacher	Coach	Parent	Teacher	Coach	Parent
Statistic	0.285	0.331	0.130	0.217	0.364	0.130
Df	10	5	20	10	5	20
Sig.	0.021	0.200	0.200	0.200	0.029	0.200

Table 6. Kruskal-Wallis Test

	Actual Performance	Desired Performance
Kruskal Wallis	5.829	3.762
df	2	2
Asimp. Sig.	0.054	0.152

The qualitative findings further support these results, indicating that teachers, coaches, and parents share similar views that the current basketball coaching and development policy model remains suboptimal across key areas, including financial support, club–school collaboration, talent identification and coach development, training facilities and athlete career support, competition systems, and scientific research.

Furthermore, the identified performance gaps are largely attributed to the lack of updated models or innovations that can provide practical guidance across key performance tasks. In practice, all respondent groups highlighted that the current coaching and development system remains insufficiently structured and requires improvement through the implementation of more systematic and integrated approaches.

Based on both the survey and semi-structured interview findings, it can be concluded that there is a need to update and refine the basketball coaching and development policy model to improve the overall quality and equity of coaching practices. This development should take into account the identified performance gaps to ensure that future policy models are more comprehensive and integrative, particularly in guiding coaches to address practical challenges in the field.

The findings of this study provide an important foundation for future research aimed at developing an innovative basketball coaching and development policy model. The integration of actual performance, desired performance, and performance gap analysis offers a comprehensive basis for formulating practical performance tasks that can guide coaches in developing high-quality athletes with strong character.

However, this study is limited to the analysis of needs across six main variables: funding support, organizational policies for club–school collaboration, talent identification and coach development systems, training facilities and career support, competition systems, and scientific research and innovation. Future studies are encouraged to expand these variables and explore more context-specific factors in basketball development.

Qualitative Analysis of Actual Performance

The qualitative findings provide deeper insights into the actual performance of basketball coaching and development policies across the examined variables. Overall, respondents consistently indicated that support systems remain limited and insufficiently structured.

Interview data revealed that funding support for basketball development is still very limited, as it is not considered a priority within government-supported sports programs, as stated by AS (Teacher, male, 45 years):

"Especially for sports extracurricular activities. First of all, the government's funds are limited, there is a limit. Then there are priorities."

The concern was also expressed by OW (Basketball coach, male, 26 years):

"Lack of support. ... almost all of the funds are covered by the children and parents".

Similarly, SS (Parent, male, 52 years) highlighted,

"So, I am, as the head of the parent committee, confused about the finances needed by the basketball club. Because they think it is not a sport that can be demanded to get an achievement. Different from karate, silat, badminton. ... my child is playing basketball, financial support is very much a necessity. ... the (school) management tends to turn a blind eye".

The actual performance of the existing athlete career support variables is still less than optimal. This is in accordance with what was conveyed by the AS PE teacher (Teacher, male, 45 years),

"... the size of the field ... is not standard, maybe only 3/4 of the size of a normal court. It is impossible to provide facilities with national or international standards because of the limitations of the land. That's why the other stakeholders from clubs, parents, or students' desire to rent a court is actually possible."

Furthermore, OW (basketball coach, male, 26 years) said,

"There is no clear (career support) from the government. But most of what students do for their basketball career is they usually pursue it on their own, or those who have good achievements will be chosen by coaches from schools".

From a parental perspective, SS (parent, male, 52 years) noted,

"The facilities are not yet standard ... do not meet the actual requirements to support children to become basketball athletes. ... when they practice at school, the feelings are different when playing on a national standard basketball court. Why is it mentioned as not a priority (basketball)? Because government's intervention here is still minimum. We can see that basketball has been around for a long time, but why is it losing to football? The interest is not losing, but the euphoria is."

The data indicate that structured coach development programs are largely absent. AS (Teacher, male, 45 years) stated,

"Well, if there is coaching for coaches... actually most of them are non-existent. So sometimes for extracurricular coaches, schools often take part-time coaches from outside...."

Similarly, OW (Basketball coach, male, 26 years) explained,

"...there is no formal direction... I usually join training workshops on my own initiative..."

In addition, SS (Parent, male, 52 years) added,

"In my opinion, and to my knowledge ... there is no upgrading program for extracurricular teachers..."

Thus, it can be seen that the coaching system for both athletes and coaches themselves is still not optimal, becoming another obstacle in the implementation of equal coaching.

Actual performance on the variables of sports organization policy in the club's collaborative innovation policy with schools related to coaching and development also still needs to be considered, as collaboration between schools and clubs remains underdeveloped. ES (Teacher, male, 55 years) stated,

"...if schools want to achieve at the national level... development must start early... but there is no regulation or financial support..."

Furthermore, OW (basketball coach, male, 26 years) emphasized the need for innovation,

"As far as I can see ...innovation is needed... so that lower-level schools can also develop..."

A parent (SS, male, 52 years) reflected,

"... but if you look at the others, they are actually progressing, because the principals dare to take actions. ... So what is the problem? Is it the communication, the cooperation, or the regulation? This is what we have to explore."

This finding implies that innovation in basketball coaching and development can be more effectively implemented across schools in Indonesia if supported by clear and structured policy references from relevant government institutions. Further, the competition system is also considered inadequate. AS (Teacher, male, 45 years) explained,

"...there used to be tiered competitions like O2SN... but now basketball is no longer a priority... there is no tiered basketball, except those organized by a private company. In high school level it is DBL. Alternatively, we can go through that route, but the competition is pretty tight. Even though they represent the names of the school, we still have to join clubs."

OW (Basketball coach, male, 26 years) added,

"In my opinion there is still a lot that is missing. Especially for middle and amateur teams. ...many competitions use a knockout system... so players only play once and gain limited experience... They don't get much experience. While the event is also limited to amateur and middle classes".

Respondents reported minimal integration of scientific research. SS (Parent, male, 52 years) stated,

“...I have not seen research or studies supporting extracurricular basketball, even from students or else... there should be input from universities or college students who someday would be sports teachers...”

Overall, the qualitative findings indicate that the current basketball coaching and development system is constrained by limited funding, inadequate facilities, lack of structured coach development, weak collaboration, limited competition systems, and minimal research integration. These findings reinforce the quantitative results and highlight substantial gaps in the existing system.

Confirmed Desired Performance

The qualitative findings indicate that respondents consistently emphasized the need for stronger and more structured funding support as a key component of desired performance in basketball coaching and development. A physical education teacher highlighted the importance of collaborative funding strategies, stating that “...we have to cooperate with parents... to minimize the financial burden needed to support the activity” (ES). Similarly, the coach emphasized the need for clearer institutional policies and transparency in funding mechanisms, noting that “...schools should be more open about extracurricular funding policies... and the required procedures...” (OW).

From the parents’ perspective, financial constraints were identified as a critical barrier to athlete development. One parent explained that “...financial support is very minimal... many talented children are constrained because they cannot meet the financial demands...” (SS). The respondent further suggested that broader stakeholder involvement, such as corporate social responsibility (CSR), could serve as an alternative funding source to support basketball development programs.

Taken together, these findings suggest that the desired performance in funding support is not only related to increasing financial resources, but also to establishing transparent, collaborative, and sustainable funding systems involving schools, parents, and external stakeholders. Without such systemic support, the development of young basketball athletes is likely to remain constrained by financial limitations.

The findings related to training facilities and athlete career support reveal that stakeholders perceive these two aspects as interconnected components of long-term athlete development. A teacher emphasized the importance of career pathways, stating that “...my hope... is to continue their prospect to a higher level... and develop their skills further which could become their career...”, indicating that sport participation is expected to contribute not only to performance but also to future educational and professional opportunities. From the coach’s perspective, however, the primary concern lies in the inadequacy of training infrastructure, as reflected in the statement that “...the size of the field is still small... the ring is not standard...”, which directly affects the quality of training. The coach further highlighted the need for greater flexibility in accessing external facilities, noting that “... I hope the school does not limit the movement of the coach to do training outside with a more standardized facilities...”, suggesting that current institutional constraints hinder optimal training exposure. Meanwhile, the parent’s perspective extends beyond school-level limitations and points toward systemic issues in facility distribution and access. As expressed, “... usually every school has a field... but whether it meets the standards is up to the schools to manage...”, and

more importantly, the expectation that clubs should receive structured government support so that “... I hope these clubs could progress with government assistance, so they no longer have to think about the cost of training or where to rent... Ideally, the schedule has been set. Here we have ten courts ... equality will emerge...”. This reflects a broader expectation for an organized and equitable facility management system at the regional or national level. Taken together, these perspectives indicate that the desired performance is not limited to improving physical infrastructure, but rather involves the establishment of an integrated system that connects facility standardization, access flexibility, and athlete career pathways.

The findings related to the coach development system reveal a fundamental divergence in how stakeholders conceptualize the role of coaching within basketball development. From the teacher’s perspective, coaching in school-based extracurricular activities is primarily oriented toward educational outcomes rather than performance, as reflected in the statement that “...extracurricular activities are not only [about] achievement... but... character building and preparing students for their future lives...”, and that “...it’s different with clubs that focus on achievements... extracurricular activities are included in educational sports... not achievement sports.” This highlights a pedagogical orientation that prioritizes values and developmental processes over competitive success. In contrast, the coach’s perspective emphasizes the need for systemic support and professional development structures:

“...more collaboration between organizations, especially Perbasi, can create innovations in coaching programs to improve their abilities and expand their knowledge... and even raise the communities’ interest in becoming coaches”

It indicates that current coaching development is largely informal and lacks institutional coordination. This suggests a gap in continuous professional development pathways for coaches, particularly in linking grassroots coaching practices with national sport governance structures. Meanwhile, parents adopt a more outcome-oriented stance, stressing the importance of coach competence and formal qualifications. As expressed by one respondent,

“...if you want the children to compete and get achievement, then all the coaches and the sports teachers [should] be given training ... school could not afford to pay for a coach. But in clubs, the coaches are mostly qualified. They have at least coaching certificates to suit their coaching targets, whether elementary, junior, or high school level ...”

This perspective underscores the importance of certification systems and competency-based coaching standards to ensure effective athlete development. The findings regarding organizational policy and club–school collaboration indicate a shared recognition among stakeholders that effective basketball development requires stronger institutional integration. From the teacher’s perspective, the primary concern lies in the lack of structural clarity and coordination among governing bodies. As expressed by ES (PE Teacher, male, 55 years),

“...we should sit together... from top to bottom... between KONI... Ministry of Youth and Sports... Ministry of Education... Bapopsi... that must be arranged properly... don’t let [it] overlap...”

This highlights a systemic issue of fragmented governance, where unclear roles and overlapping authority hinder the implementation of coherent development programs, including budgeting and program execution. From the coach's perspective, the emphasis shifts toward functional collaboration that enables athlete mobility across systems, as OW (Coach, male, 26 years) expressed,

"Maybe the policy is more towards how we can train athletes from school but also could join in events related to Dispora or KONI events".

In addition, according to a parent participant, SS (Parent, male, 52 years),

"Of course, it is necessary. Because the search for potential cannot be done through extracurricular activities. Now, can a teacher assess whether this child is talented or not? The one who can assess that is the coach. ... That's why there must be collaboration between clubs and schools ..."

The findings related to the competition system highlight its critical role as a structural driver of effective basketball coaching and development. Stakeholders consistently emphasized that the current competition structure is insufficiently organized to support fair assessment and progressive athlete development. As expressed by the ES (PE Teacher, male, 55 years),

"... the office should hold it by appointing a vendor to implement it." In addition, according to OW (Coach, male, 26 years old),

"... I hope it can be categorized at a certain level. For example, for junior high school level there are amateur classes, middle classes, and also upper classes. So the schools that have good teams compete with other teams on the same levels. Teams that have the capacity still have many amateur players or are still learning to compete at the same level."

Similarly, the parent's perspective reinforces this need for structured progression, drawing a direct comparison with established football league systems,

"I want the competition to be like in football, that there are levels. League 4, League 3, League 2, League 1, well that can be separated. Don't let the experts and the new ones be put together ... " (Parent, male, 52 years)

Identification of The Causes of Performance Gaps

The analysis of qualitative findings reveals that performance gaps in basketball coaching and development are not caused by isolated factors, but rather by systemic limitations across multiple interconnected domains.

First, in terms of funding support, stakeholders consistently identified structural financial constraints as a primary barrier. ES (PE Teacher/male/55 years old) expressed,

"Regarding the issue of financial support from the school, there is none at all, because the orientation of the school depends on the BOS funds. Yes, the BOS funds are limited funds. Not all activities are to become priority because the funds have to be spread for all programs."

It is in line with what was conveyed by OW (Coach, male, 26 years).

Second, limitations in training facilities and athlete career support further contribute to the performance gap. As highlighted, "...the size of the field... is not standard... due to land limitations...", which directly constrains training quality. At the same time, stakeholders emphasized the lack of long-term career pathways, particularly due to minimal government involvement, as expressed in "...government intervention... is still minimal... basketball... is not a priority...". These findings suggest that infrastructural limitations are compounded by the absence of a structured athlete development pathway, resulting in restricted opportunities for progression beyond the school level.

Third, the coach development system is hindered by both conceptual and structural challenges. From a conceptual standpoint, schools' position extracurricular activities primarily as tools for character development rather than performance achievement. Structurally, the lack of formal guidance and limited access to coaching development opportunities further weakens the system as conveyed by the study participants. Further, participant OW (Coach, male, 26 years old) noted that "...activities that help the community to become coaches are still very limited..." This indicates the absence of a coherent regulations and support for coaches' continuous professional development.

Fourth, in relation to organizational policy and collaboration, the performance gap is also influenced by the limited scope of school-based extracurricular programs. As expressed by AS (teacher, male, 45 years),

"Well, actually, the maximum for extracurricular activities is only limited to coaching. Well, actually, schools have maximized it because the purpose of extracurricular activities is only to channel talents and interests. Well, only channeling talents and interests when achievements are just a bonus."

This statement indicates that, although schools have fulfilled their role within the educational framework, extracurricular activities are not primarily designed to achieve competitive performance outcomes. Meanwhile, a parent emphasized (parent, male, 52):

"That's why at the extracurricular level, basketball can't be used for achievements like that. Because the touch between the government and the club, namely in Perbasi with the collaboration level, is still minimal. "

In short, coordination in schools is still very limited by school regulations (Bjorndal & Gjesdal, 2020).

Finally, the competition system also contributes to the performance gap due to the absence of structured and tiered competitive pathways. Stakeholders noted the discontinuation or weakening of previous systems, such as "...O2SN... which used to be tiered... but now... basketball is not a priority...". In addition, a lack of communication among stakeholders was identified as a key issue, as expressed in "...lack of communication... between associations, clubs, and teachers...". This results in mismatched competition levels, where beginners and advanced players are often grouped together, limiting fair competition and developmental progression.

DISCUSSION

The findings of this research indicate that the implementation of basketball coaching programs in school environments still faces various fundamental obstacles, including limited funding sources, less optimal synergy between educational institutions and sports associations, an unsystematic talent recruitment system, limited support for young athletes' career development, inadequate training facilities, and competitions that are not structured in a hierarchical manner. These results confirm the perspective that effective coaching initiatives must begin with an accurate needs assessment, so that the formulated policies are relevant to empirical conditions and able to address the structural obstacles that occur (Black, 2017).

The minimal budget allocation revealed in this study is consistent with various studies emphasizing that the success of sports sector development, particularly in developing countries, is largely determined by the continuity of funding, which should be treated as a long-term investment rather than merely an operational expense (Leonardi et al., 2021). This perspective aligns with findings from Brazilian sports policy, which indicate that significant fluctuations in funding can undermine consistent development efforts (Castro & Mezzadri, 2025). Nationally, the Ministry of Youth and Sports (Pasaribu et al., 2025) also emphasized that sports development within the education pathway has not been effectively connected to high-performance sports programs due to weaknesses in financing and intersectoral policy coordination. The lack of structured collaboration between schools and clubs identified in this study also correlates with international evidence showing that the transition of youth athletes to high-level competition is strongly influenced by explicit and standardized institutional systems (Howard et al., 2025). Without clear communication protocols, standard operating procedures for collaboration, and an organized distribution of responsibilities, the development pipeline becomes unsustainable and may hinder the progress of talented athletes (Rongen et al., 2018). Furthermore, the importance of a policy model that integrates the education sector, families, sport communities, and performance organizations has been recommended in a comprehensive review of youth athlete development policies (Sulz, 2024).

The issue of uneven talent selection identified in this study also aligns with literature indicating that talent identification processes in sports still tend to be subjective, not based on scientific evidence, and often fail to consider biological maturity (Cahill & MacNamara, 2024; Shahidi & Carlberg, 2023). A multidisciplinary and longitudinal approach is recommended to improve the accuracy of talent identification and reduce selection bias (Zhao et al., 2024). Furthermore, sport-specific technical competencies have been shown to be the strongest indicators of future performance; therefore, the selection process must include a systematic assessment of technical skills (Koopmann et al., 2020). This reinforces the urgency of updating athlete selection methods in schools and clubs in Indonesia to be more objective and based on empirical data.

The lack of athlete career support and inadequate training facilities identified in this research are consistent with studies on the implementation of Long-Term Athlete Development (LTAD), which emphasize that long-term athlete development requires standardized training facilities, adequate educational support, and a conducive learning environment (Rothwell et al., 2020; Crespo et al., 2025). Limited or substandard field conditions, as reported by respondents, have been shown to restrict the development of young athletes' technical skills and competitive experience.

Another dimension requiring serious attention is coach capacity development. The results of this study indicate that coaches often operate based on personal experience without adequate formal training. However, the literature confirms that coach quality is

highly dependent on multi-level education, professional mentoring, and participation in communities of practice (Van-Mullem & Mathias, 2021; Bertram et al., 2017). Structured coach development programs have also been identified as a key pillar in the success of national-level athlete development systems (Lefebvre et al., 2021).

The lack of a tiered competition design and the dominance of knockout systems are also crucial issues. A well-structured competition system has been shown to significantly impact athlete development by providing sufficient playing time and ensuring competitive experiences that are appropriate to athletes' ability levels (Devriesere et al., 2024). A tiered competition system is therefore recommended as a more effective approach to youth athlete development (Güllich et al., 2022; Till & Baker, 2020). The respondents' findings that competitions are too short and lack proper tiering underscore the urgent need for reform of youth competitions at both regional and national levels.

Overall, the findings of this study reinforce the urgency of developing a more integrated, sustainable, and evidence-based basketball development policy model. Inter-institutional synergy, increased funding allocation, coaching competency development, more objective talent identification, facility improvements, and competition system reform are all key elements recommended by various international and national studies (Lever et al., 2025; Larkin et al., 2023; Galatti et al., 2017). The implementation of these recommendations is expected to create a more solid, equitable, and long-term coaching ecosystem for the advancement of basketball in Indonesia.

CONCLUSION

This study concludes that the needs analysis of actual performance, desired performance, and performance gaps provides a comprehensive picture for developing an innovative basketball coaching and development policy model. The findings show that basketball coaching and development are not yet optimal across six key variables: funding support, athlete career support, training facilities, coach development, club–school cooperation, and tiered competition systems. These variables are consistently rated low in actual performance but high in desired performance, indicating substantial performance gaps perceived similarly by teachers, coaches, and parents.

The agreement across respondent groups confirms that improvements in these variables are essential to support a comprehensive basketball development policy. Attention to these aspects is necessary to reduce performance gaps and to guide the formulation of a more structured and effective basketball coaching and development model.

This study contributes by providing a systematic needs analysis that identifies priority areas requiring policy improvement. Strengthening competition systems, enhancing training quality, improving athlete development support, and promoting coach professionalism are important steps. The proposed innovative basketball coaching and development model can help address the performance gaps experienced by basketball stakeholders and serve as a foundation for future basketball development policies suited to 21st-century needs.

AUTHORS' NOTE

The authors declare that there is no conflict of interest regarding the publication of this article. The authors confirmed that the paper was free of plagiarism.

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